

REMARKS/ARGUMENTS

Claims 1 to 3, 5, 6, 8, 10 and 12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. (U.S. Patent 6,983,232) in further view of Newman (U.S. Patent 6,603,483) and Russell et al. (U.S. Publication 2004/0122629). Claim 11 was rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. in view of Newman, Russell et al. and Nakano et al. (U.S. Publication 2003/0018542).

Reconsideration of the application based on the following remarks is respectfully requested.

35 U.S.C. 103 Rejections

Claims 1 to 3, 5, 6, 8, 10 and 12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. in further view of Newman and Russell et al.

Nguyen et al. describes a customer benefit tool which allows customer models to be validated under acceptance test conditions to ensure that the machine based processes and cycle times have been accurately modeled. (See col. 2; lines 51 to 54). A user proposes a configuration for an assembly line by selecting objects that represent assembly line equipment, the objects having specific values for operating characteristics. "The configuration and associated operating characteristic values are then used to build a discrete event simulation." (See col. 3; lines 9 to 10). To streamline the building of a simulation by selecting and arranging the simulation objects, templates may be created and values may be read into the template to create the simulation object." (Nguyen col. 3; lines 14 to 18). These simulation objects can also be formed using designer objects and templates. (See col. 5; line 56 to col. 6; line 1).

Newman relates to a proofing system, which involves simulating a printed image that would be printed by a printing press by rendering digital image data on a CRT display. (Col. 1, lines 19 to 31).

Russell et al. discloses a method and arrangement for developing a rod pattern design for a nuclear reactor. (Paragraph [0011]). A user may selected a plant to be evaluated (S5), define limits to be used in the simulation for the test rod pattern design (S10), establish a sequence strategy for simulation (S20), perform a simulation test of the rod pattern over energy cycles to obtain simulated results (S30), compare the simulated results to the defined limits (S40) and

provide data related to the comparison, illustrated which limits were violated by the simulation (S50). (Paragraph [0034]; Fig. 4).

Claim 1 recites “[a] method for simulating process flows in the graphics industry and for displaying the result calculated in the simulated process flows and/or intermediate results, comprising the steps of:

inputting or selecting at least one order data set representing a print job via a user interface of a computer;

selecting process data sets representing machines via a graphical user interface, the process data sets representing the machines being stored in a library, the print job determining minimum requirements to be met by a machine to be eligible as a process data set for a simulation and excluding machines that do not meet the requirements from the simulation;

distributing the at least one order data set among the selected process data sets;

calculating links between the order data set and the process data sets as a function of the order data set and the process data sets;

creating a process flow from the calculated links;

calculating results or intermediate results for the process flow using the order data set;

and

outputting the results or intermediate results on a display of the computer.”

It is respectfully submitted that none of the cited references discloses “the print job determining minimum requirements to be met by a machine to be eligible as a process data set for a simulation and excluding machines that do not meet the requirements from the simulation” as recited in claim 1. Nguyen et al. discloses an electronic components assembly system wherein a consultant or customer chooses a line configuration of designer objects (pieces of assembly line equipment) from a machine library, alters parameters of a designer object to create a simulation object, runs a test simulation on the simulation objects, and then compares the test simulation to an acceptance testing. (See, e.g., Col. 11, Lines 9 to 28; Col. 15, Lines 31 to 40; Col. 2, Lines 42 to 58). Nguyen et al. does not relate in any way to a “print job,” as required by claim, especially distributing at least one order data representing a print job among selected process data sets representing machines as is required by the language of claim 1. Nguyen et al. also and does not disclose “excluding machines,” as required by claim 1.

Newman relates to a proofing system, which involves generating a color transformation sequence, transforming color image data for a particular printer and displaying the image data on a proofer display. (Col. 1, lines 19 to 31). Newman does not disclose distributing at least one order data representing a print job among selected process data sets representing machines as is required by the language of claim 1 and thus cannot cure the “print job” deficiency of claim 1 or the deficiency of Nguyen et al. with respect to the “distributing” step of claim 1. Also, Newman does not disclose “excluding machines” and thus cannot cure this deficiency of Nguyen et al. with respect to claim 1.

Russell et al. discloses a method for selecting a pattern of test rods (e.g., notch positions and sequences for control blade patterns for BWRs, group sequences for control rod patterns for PWRs, etc.) for use in a nuclear reactor plant by inputting input values and performing a simulation based on the input values. (Paragraphs [0022], [0034]). The input values may be limited by input limits, which may be related to client-inputted reactor plant specific constraints and core performance criteria. (Paragraph [0038]). A sequence strategy for the blade positions may be established by a user with the aid of blade control themes, which helps the user identify permissible blade groups and prevent undesirable blade groups from being used. (Paragraph [0039]).

Thus, Russell et al. merely discloses that a reactor plant or a reactor core determines limits that must be met by a blade sequence and a user may prevent undesirable blades from being used in a rod pattern simulation. This is clearly not “the print job determining minimum requirements to be met by a machine to be eligible as a process data set for a simulation and excluding machines that do not meet the requirements from the simulation” as required by claim 1. It is respectfully submitted that the reactor plant or the reactor core that determines limits of the blade sequence in Russell et al. is clearly not the “print job” of claim 1 and is also clearly not analogous to the role of the “print job” in this limitation of claim 1. The simulation of nuclear energy production in Russell et al. is completely distinct from the simulation of “process flows in the graphics industry” as described in claim 1. Claim 1, as whole, requires that machines are excluded from a simulated process flow involving the distribution of order data of a print job among the selected machines based on minimum requirements of the print job. The situation in Russell et al. is not analogous because the reactor plant or core which limits the blade sequence

in Russell et al. is merely the desired location of the simulation and is any data that distributed with the selected blades of the rod pattern. Thus, the disclosure of Russell et al., which is limited in applicability to the simulation of power generation and clearly does not in any way suggest a print job excluding machines from a process flow, does not cure the deficiencies of Nguyen et al. and Newman with respect to claim 1.

Furthermore, it is respectfully submitted that it would not have been obvious to one of skill in the art to have modified Nguyen et al. in view of Newman and Russell et al. to meet the limitations of claim 1. One of skill in the art would not have modified Nguyen et al. in view of Newman to meet the limitations of claim 1 because Newman is related to a proofing process, which involves testing print quality of input data by generating a test print on a display, and is not applicable to the simulation of an assembly line to ensure that the machine based processes and cycle times have been accurately modeled. Newman relates to simulating printing quality, but not simulating timing and processes of an assembly line, which is the purpose of Nguyen et al. One of skill in the art would not have had any reason to modified the assembly line simulation of Nguyen et al. in view of the print quality simulation in Newman. Such simulations are completely distinct and would not be incorporated with one another by one of skill in the art. If anything, if the references were combined, an assembly line would be modeled, and then, in a distinct process, printing quality of the assembly line would be tested, which clearly does not meet the limitations of claim 1. Thus, it is respectfully submitted that one of skill in the art would not have combined Nguyen et al. and Newman to have used the assembly line simulation of Nguyen et al. for a print job.

Also, it is respectfully submitted that one of skill in the art would not have modified the assembly line simulation system of Nguyen et al. in view of the nuclear rod pattern designing system of Russell et al. to meet the limitations of claim 1. Designing a rod pattern for the core of a nuclear reactor, an extremely specialized art, is completely distinct from simulating an assembly line or simulating the process flow in the graphics art industry. As discussed above, the reactor plant or core that determines limits of the blade sequence in Russell et al. is clearly not the "print job" of claim 1 and is also clearly not analogous to the role of the "print job" in claim 1. If anything, the combination of Nguyen et al. and Russell et al. would teach setting limits of equipment in an assembly line based on other equipment used in the assembly line or

specification of the plant in which the assembly line is located, and not any data that is input into the simulation of the assembly line. Also, Russell et al. in no way teaches or in any makes obvious distributing at least one order data representing a print job among selected process data sets representing machines as is required by the language of claim 1. Thus, claim 1 would not have been obvious in view of the cited references at the time of the present invention.

Withdrawal of the rejection under 35 U.S.C. 103(a) of claim 1, and claims 2, 3, 5, 6, 8 and 10 depending therefrom, is respectfully requested.

Claim 12, as amended, recites a device for simulating process flows in the graphics industry and for displaying the result calculated in the simulated process flows or intermediate results on a display device, comprising:

- at least one user interface for inputting or selecting at least one order data set representing a print job, the print job determining minimum requirements to be met by a machine to be eligible as a process data set for a simulation;

- at least one graphical user interface for selecting process data sets representing machines;

- at least one computer for excluding machines that do not meet the requirements of the print from the simulation and for distributing the at least one order data set among the selected process data sets and for calculating links between order data set and process data sets as a function of the order data set and the process data sets;

- the computer for creating a process flow from the calculated links;

- the computer for calculating the result or intermediate results for the process flow using the order data set; and

- a display for displaying the results or intermediate results.

For at least the reasons set forth above with regard to claim 1, none of the cited references teaches or shows “the print job determining minimum requirements to be met by a machine to be eligible as a process data set for a simulation” and “at least one computer for excluding machines that do not meet the requirements of the print from the simulation and for distributing the at least one order data set among the selected process data sets,” as now recited in claim 12. Also, it would not have been obvious to one of skill in the art to have combined the cited references to meet the limitations of claim 12.

Withdrawal of the rejection of claim 12 under 35 U.S.C. 103(a) is respectfully requested.

Claim 11 was rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. in view of Newman, Russell et al. and Nakano et al.

Nguyen et al., Newman and Russell et al. are described above.

Nakano et al. is cited solely for its alleged disclosure of the additional limitation: “wherein the process data sets contain dimensions associated with graphics industry devices or the dimensions associated with the devices are displayed on a display device.” As such, it cannot cure the deficiencies in Nguyen et al., Newman and Russell et al. outlined above.

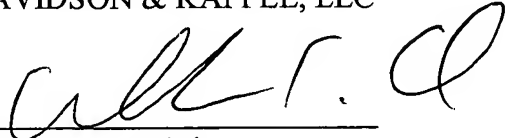
Withdrawal of the rejection of claim 11 under 35 U.S.C. 103(a) is respectfully requested.

CONCLUSION

The present application is respectfully submitted as being in condition for allowance and applicants respectfully request such action.

Respectfully submitted,
DAVIDSON, DAVIDSON & KAPPEL, LLC

By: _____


William C. Gehris,
Reg. No. 38,156

Davidson, Davidson & Kappel, LLC
485 Seventh Avenue
New York, New York 10018
(212) 736-1940